McDOWELL MOUNTAIN ROAD STREAMGAGE
FCD GAGE ID# 5923

STATION DESCRIPTION

LOCATION - The gage is located approximately one mile southwest of the entrance to McDowell Mountain Park. Latitude 33° 39' 23.8" North; Longitude 112° 47' 58.3" West. Located in SE1/4 SE1/4 S26 T4N R6E, in the Fort McDowell 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed on May 18, 2004.

DRAINAGE AREA – Approximately 11.9 mi^2

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.00 feet, levels of May 18, 2004. The PT is on the right bank of the wash.

There is one crest gage located at the site on the left bank of the wash. The pin elevation is 0.74 feet gage height, levels of May 18, 2004.

There are no staff gages at this site.

ZERO GAGE HEIGHT – Zero gage height is defined as the elevation of the pressure transducer at the time of installation.

HISTORY – Gaging established on May 18, 2004. No previous gaging history at this location.

REFERENCE MARKS

RM-MCDMPK is an FCD brass cap located about 15 feet east of the standpipe. Elevation 6.00 feet gage height, levels of May 18, 2004.

RP-1 is the top of the stream ward PT bracket (sign rail) to which the PT housing is attached. Elevation 0.48 feet gage height, levels of May 18, 2004.

CHANNEL AND CONTROL - The channel has a natural bottom and sides. The channel bottom is composed mainly of sand and granite. Flows within the channel are anticipated to be shallow. No evidence of significant high flows was present. Downstream of the gage, several small channels flow into the wash. Just upstream of McDowell Mountain Road, several washes converge before crossing the road.

There was no evident low flow control. The channel is the control for stages above about 0.5 feet gage height.

RATING - The current rating is Rating #1, dated May 18, 2004. The rating was developed using channel geometry as surveyed on May 18, 2004 and slope information from the Fort McDowell topographical map. A Manning analysis of the information was computed for several stages from 0.5 to 2.5 feet. The rating needs to be verified from direct or indirect measurements.

DISCHARGE MEASUREMENTS - Direct measurements could be made by wading in the area near the gage. Higher flows can be measured by indirect methods. The gage itself is located in a suitable indirect reach.

POINT OF ZERO FLOW - The low point in the gage cross section of the channel was found at -0.10 feet gage height, levels of May 18, 2004.

FLOODS – The peak flood since installation was 652cfs at 1.77 feet gage height, occurring July 23, 2007.

REGULATION - None known

DIVERSIONS - None known

ACCURACY - Fair

JUSTIFICATION - Monitor flows in the wash for MCDOT for road closure of McDowell Mountain Road.

UPDATED - July 19, 2011
DE Gardner